

ABSTRACT

This invention relates to an alkaline battery including spherical nickel oxyhydroxide that includes crystals having a β -type structure. In a powder X-ray diffraction profile of the spherical nickel oxyhydroxide obtained using a Cu target, a half-width W of a diffraction peak P derived from a (001) plane is 0.6° or less. The ratio H/W of a height H of the peak P to the half-width W is 10,000 or more. The nickel contained in the spherical nickel oxyhydroxide has a mean valence of 2.95 or more. The use of such nickel oxyhydroxide in an alkaline battery results in a battery having excellent heavy-load discharge characteristics and improved energy densities.